IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re Application of:)
CHRISTOPHER M. MACROGLOU)
Serial No.: 09/190,788	ALIGNMENT DEVICE AND METHOD
Filed: November 12, 1998) FOR ALIGNING
Art Unit: 3711)
Examiner: RAEANN GORDON)
Atty Dock No.: 97-019 DIV))

Pittsburgh, Pennsylvania 15219 September 29, 2006

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September 29, 2006

Dated

APPELLANT'S APPEAL BRIEF PURSUANT TO 37 C.F.R. §41.37

The above-identified application comes before the United States Patent and Trademark Office Board of Appeals and Interferences from the twice rejection of Claims 1, 2, 13-20 and 28-31 dated September 29, 2005.

I. REAL PARTY IN INTEREST

CHRISTOPHER M. MACROGLOU the applicant of the above-identified application, is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF THE CLAIMS

Claims 29-31 are rejected under 35 U.S.C. Section 112, first paragraph. Claims 1, 2, 13-20 and 28 are rejected under 35 U.S.C. Section 103(a). Claims 21-24 are allowed. The appealed claims are claims 1, 2, 13-20 and 29-31.

IV. STATUS OF AMENDMENTS

No amendment has been filed subsequent to the office action of September 29, 2005.

V. SUMMARY OF CLAIMED SUBJECT MATTER

In general, the present invention provides device and methods for assisting a person in achieving a desired or a proper alignment of a portion of the person's body (for example, while golfing). In one embodiment, as illustrated in Figures 1 through 4C, device 10 includes a mechanism adapted to project a generally linear extending projection of light on a surface so that the extending projection of light is visible to the person. Device 10 can, for example, include a light source attached to support member 20. In the illustrated embodiment, the mechanism is attached to support member 20 in an orientation such that the extending projection of light is generally parallel to an alignment of a plane transversing the person's eyes. The light source thus generates a visible alignment line of light A on, for example, the ground in front of the golfer that is

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generally parallel to an alignment of the golfer's eyes when support member 20 is worn on the golfer's head (for example, during putting). The light projecting mechanism can, for example, include a laser 70 and a generally cylindrical lens 75 positioned transversely to the light beam emanating from laser 70. As known in the optics arts, lens 75 creates a planar beam or fan of light which emanates perpendicular to the axial alignment of lens 75. This planar fan of light forms visible alignment line A on the ground parallel to the orientation of the golfer's eyes.

Another embodiment of an alignment device 200 of the present invention is illustrated in Figure 5. In this embodiment, alignment device includes a support member including a belt member 220 upon which a light source is attached. As described above, the light source generates a visible alignment line of light A on the ground in front of the golfer that is generally parallel to an alignment of that portion of the golfer's body upon which support member is worn. As also described above, the light source preferably comprises a laser 230 and a generally cylindrical lens 240 positioned transversely to the light beam emanating from laser 230. The light source can be adjustable relative to belt member 220 to enable the user to adjust the position of line A away from the body of the user. Device 200 of Figure 5 can be worn on any portion of the user's body (for example, on the chest or sternum region to study the alignment of the shoulders/chest and/or on the waist or hip region to study the alignment of the hips). The alignment of device 200 can be checked or calibrate simply by standing against a wall and ensuring that line A is generally parallel to the wall. A switch for turning laser 230 on and off can be located on the laser or remotely.

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Does claims 29-31 comply with the written description requirement of 35 U.S.C. 112, first paragraph?

2. Are claims 1, 2, 13-20 and 28 patentable under 35 U.S.C. 103(a) over Harness (U.S. 5,467,992) in view of Carney (U.S. 6,213,887)?

VII. ARGUMENT

Rejections Under Section 112, first paragraph of Claims 29-31

In the Office Action dated September 29, 2005, the Examiner rejected Claims 29-31 under 35 U.S.C. 112, first paragraph, "as failing to comply with the written description requirement." Specifically, the examiner asserted that:

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term "torso" in claim 29 is not part of the original specification.

In addressing Applicant's arguments filed on July 25, 2005, the Examiner specifically asserted that:

The 35 USC 112, first paragraph rejection is maintained. Applicant argues the figures and specification inherently provides support for the term 'torso'. The Examiner disagrees. The specification and drawings as originally filed recite and illustrate the device being worn in the chest area. The term 'chest' is narrower and is not synonymous with 'torso'. 'Torso' broadens the claim and therefore is new matter.

Applicant respectfully asserts that there is clear support in the specification for the term "torso" as set forth in Claim 29. As clear to one skilled in the art from the specification, claims and drawings as originally filed, the methods and devices of the present invention can be used in connection with any "portion of the person's body" (see, for example, claim 1 as originally filed). As clear to one skilled in the art, the

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specification and drawings are not limited to the device being worn on the chest area as asserted by the Examiner. As set forth on page 10 of the specification:

Another embodiment of an alignment device 200 of the present invention is illustrated in Figure 5. embodiment, alignment device comprises a support member including a belt member 220 upon which a light source is attached. As described above, the light source generates a visible alignment line of light A on the ground in front of the golfer that is generally parallel to an alignment of the golfer's [sic] that portion of the golfer's body upon which support member is worn. described above, the light source preferably comprises a laser 230 and a generally cylindrical lens 240 positioned transversely to the light beam emanating from laser 230. The light source can be adjustable relative to belt member 220 to enable the user to adjust the position of line A away from the body of the user. Device 200 of Figure 5 can be worn, for example, on the chest or sternum region to study the alignment of the shoulders and/or on the waist or hip region to study the alignment of the hips. The alignment of device 200 can be checked or calibrate simply by standing against a wall and ensuring that line A is generally parallel to the wall. A switch for turning laser 230 on and off can be located on the laser or remotely.

Emphasis added. It is well settled that "the written description requirement does not require the applicant to describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." <u>Union Oil Co. of California v. Atlantic Richfield Co.,</u> 208 F.3d 989, 997, 54 USPQ2d 1227, 1232 (Fed. Cir. 2000), *cert. denied*, 121 S.Ct. 1167 (2000). Moreover, *ipsis verbis* disclosures or exact words are not necessary to satisfy the written description requirement of Section 112. Indeed, "the disclosure need only reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question." <u>Fujikawa v. Wattanasin</u>, 93 F.3d 1559,1570, 39 USPQ2d 1895, 1904 (Fed. Cir. 1996). Although, the word "torso" is not specifically set forth in the specification, it is clear from and inherent in the specification that applicant had possession of the subject matter set forth in claim 29 and indeed for any portion of the user's body. Use of the term "torso" in the claims does not broaden the claim coverage as

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asserted by the Examiner. Moreover, the torso is the human trunk, and the embodiments of the present invention described on page 10 in which a device of the present invention is operatively connected to the chest and/or to the hips of a person, clearly provide a indication of the alignment of the full torso (and any other portion) of the person. The Appellant respectfully asserts that the Appellant need not describe the device of the present invention in operative connection with each portion of the person's body verbatim, when clear description is provided for any portion of the person's body generally and for the limits of the human trunk (shoulders to hips) specifically.

Rejections Under Section 103(a) of Claims 1, 2, 13-20 and 28

In the Office Action September 29, 2005, the Examiner also rejected Claims 1, 2, 13-20, 27, and 28 under 35 U.S.C. 103(a) "s being unpatentable over Harkness (5,467,992) in view of Carney (6,213,887)." Specifically, the examiner asserted that:

Harkness discloses a device support member worn around a person's head and an attached laser light (abstract) generating a linear alignment beam of light visible to the person to provide an alignment of the person's body when in position to perform the task as stated in claims I and 15 (figs. 2 and 3). Harkness also discloses a cylindrical lens and positions the lens to direct the beam of light as in claim 2(fig 4 and col 3, lines 20-26). Regarding claims 13 and 16, figures 2 and 3 show a band worn around a person's head. Regarding claims 14, 17 and 18, the beam is visible on the ground (fig 3). Regarding claims 19 and 20, Harkness does not disclose the device around the chest or hips of the user. Harkness does disclose the device as being interchangeable among different items. However, moving the device from one body part to another is a method of use, which is not relevant to the structure of the device. Harkness discloses a spot of light on the ground and does not disclose a line of light. However, Carney teaches a line of light alignment. Regarding claim 21, Harkness discloses a device support member worn around a person's head and an attached laser light (abstract) generating a linear alignment beam of light visible to the person to provide an alignment of the person's body when in position to perform a golf stroke, (see figure 3). Providing an indication of alignment can be seen in figure 3 of Harkness, wherein the golfer is preparing for the golf stroke. Carney teaches a line of light alignment. Regarding claim 22, figure 3 displays the device on the head of the golfer and the beam of light running parallel to the golfer's eyes. Regarding claims 23 and 24, figure 3 displays the golfer preparing for a stroke and the surface wherein the beam of light meets is the ground. Regarding claims 27 and 28, Harkness

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discloses the device attached to glasses (col. 2, lines 61-65). One skilled in the art would have modified the invention of Harkness with Carney by changing the spot of light to a line of light to provide a more accurate alignment means for the user.

In addressing Applicant's arguments filed on July 25, 2005, the Examiner specifically asserted that:

Applicant argues the Harkness reference does not disclose the claimed invention. Harkness discloses a device comprising a support member worn on a person's head and a light source comprising a laser. Harkness further discloses a spot on the ground produced by the laser beam but does not disclose a line of light. Carney teaches a line of light produced by a laser beam. Applicant further argues the Harkness reference is used to prevent movement and the present invention is used to achieve the proper alignment. However, the method of using the device is not relevant to apparatus. The structural limitations as claimed are disclosed by Harkness in view of Carney. Also, the prior art is capable of performing the tasks set forth in the claims. For example, applicant claims device is attached to the support member such that the alignment of a plane transversing the person's eye when the person is in a position to perform the task. Since Harkness discloses the device is movable on the support member, it is clearly capable of being positioned in the manner claimed by applicant.

Applicants respectfully traverse the Examiner's rejection.

Contrary to the Examiner's assertion, the device of Harkness does not provide any information to the user thereof regarding the alignment of any portion of the person's body. In that regard, Figure 3 of Harkness clearly does not disclose generation of "a linear alignment beam of light visible to the person to provide an alignment of the person's body when in position to perform a golf stroke" as asserted by the Examiner. Indeed, Harkness does not even address the problem of determining alignment of any portion of the body the user thereof. Harkness discloses the use of only a visible spot of light projected onto the ground to aid a golfer in observing head movement during a golf swing. This spot of light does not and cannot to provide an indication of the alignment of the person's body when in position to perform a golf stroke or any other task. The above scope of the invention of Harkness is well set forth in Harkness and summarized succinctly in the abstract of Harkness as follows:

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A method for using a light spot projecting aid to observe head movements during a golf swing and to provide a golfer with an explanation (i.e., cause) of the effect manifested as the light spot being moved.

Unlike the present invention, Harkness provides no information to the user thereof of a plane transversing the person's eyes or any other portion of the person's body.

Notwithstanding the Examiner's erroneous assertion that Harkness discloses "a linear alignment beam of light visible to the person to provide an alignment of the person's body", the Examiner seems to recognize that Harkness discloses only a spot of visible light on the ground and does not disclose a generally linear, alignment beam, extending projection or line of light. Nonetheless, the Examiner asserts that one skilled in the art would modify the invention of Harkness in light of the disclosure of Carney by changing the spot of light of Harkness to a line of light. However, neither Harkness nor Carney is not designed to or operable to provide information on alignment of the user's body. As neither Harkness nor Carney are designed to provide feedback to the user regarding the actual alignment of the user's body, and neither Harkness nor Carney even address the problem of providing such feedback, there is absolutely no motivation for one skilled in the art to combine the teaching of Harkness with the teaching of Carney to arrive at the present invention. See, for example, Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (P.O. Bd. Appl. 1984) ("The prior art must provide a motivation or reason for a worker in the art without the benefit of appellant's specification to make the necessary changes in the reference device."); Schenk v. Norton, 218 USPQ 698, 702 (Fed. Cir. 1983) ("Modification unwarranted by the disclosure of a reference is improper."); Ex Parte Acosta, 211 USPQ 636, 637 (P.O. Bd. Appls. 1980) (Examiner's combination of two references is improper where there is no basis in the record from which it can reasonably be inferred that one skilled in the art would have been led or motivated to modify the primary reference in the manner proposed by the Examiner.).

Applicant respectfully asserts that the Examiner is clearly incorrect in asserting that the method of using the devices of the references is not relevant to the

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combination and subsequent modification of those references in an attempt to arrive at the clearly different apparatus and structural limitations of the present invention. Initially, the method of use and the stated use/purpose of a device disclosed in a reference is certainly relevant to the combination of that reference with a second reference so as to modify the device of the first reference. In that regard, it is not obvious to one skilled in the art to substantially modify the device of the Harkness to achieve another, substantially different method, use or purpose. As body alignment is irrelevant to the stated sole purpose of the device of Harkness (which is, the detection of motion), one skilled in the art would not attempt to modify that device as suggested by the Examiner to provide feedback information as to alignment. Alignment of the golfer's body as illustrated in Figure 3 of Harkness is always performed before a golf stroke, but the device of Harkness provides no information or feedback to the user thereof of such alignment.

Moreover, Carney does not disclose or suggest a means of providing feedback to a person of the actual alignment of any portion that person's body. Carney merely discloses the propagation of a line of light on the ground to indicate the target line to a particular target such as a simulated golf hole. Although Carney discloses a target line of light to which a person may attempt to align a portion of the person's body, the person is provided with no indication/feedback of how that portion of the person's body is actually aligned by the device of Carney.

In any event, however, even if one were to mechanically combine the source of a line of light disclosed in Carney with the device of Harkness (for which combination there is no motivation in the disclosure of Harkness, Carney or any combination thereof), one would not arrive at the present invention. As clear from the disclosure of Harkness and as demonstrated to the Examiner in the interview of March 4, 2002, the spot of light of Harkness does not even provide information as to the alignment of the cap on the person's head (which need not even be aligned with the orientation or alignment of the person's head) as the device need not be placed on the cap to project the light in any specific orientation. Converting the spot of light projected by the device of Harkness to a line of light would not provide a line of light generally parallel to the

alignment line passing transversely through any portion of the person's body (for example, the eyes, chest or hips) as claimed in the present invention. Neither Harkness no Carney discloses or suggests a support or attachment for maintaining a mechanism adapted to project a generally linearly extending projection of light or a line of light onto surface in a desired orientation on a portion of the person's body so that the projection of light or line light is generally parallel to the alignment of that portion of the person's body.

Even though, as recognized by the Examiner, both Harkness and Carney disclose devices designed for use in the golf industry, absent some suggestion to one of ordinary skill in Harkness or Carney of the desirability of the claimed combination, one of ordinary skill in the art – without the benefit of Applicant's specification - would not combine those disclosures, and then substantially modify the combination, to arrive at the present invention.

The Examiner recognizes that in one embodiment, the Applicant claims a device that is attached to a support member such that the alignment of a plane transversing the person's eye when the person is in a position to perform the task. With respect to this embodiment, the Examiner erroneously asserts that "since Harkness" discloses the device [for generating a spot of light thereof] is movable on the support member, it is clearly capable of being positioned in the manner claimed by applicant." To arrive at the present invention, one must first substitute a mechanism adapted to project a generally linear extending projection of light on a surface for the source of a spot of light as disclosed by Harkness. For the reasons set forth above, this is a nonobvious modification of the device of Harkness. Then, one must modify the support system of Harkness so that the substituted generally linear projection of light is generally parallel to an alignment of a plane transversing a portion of the person's body when the person is in position to perform a task. Even if the support member of Harkness is capable of being modified/adjusted to achieve this result (of which there in no disclosure or motivation in Harkness and/or Carney), this modification amounts to another nonobvious modification of the device of Harkness.

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Applicant respectfully asserts that the Examiner has failed to make a prima facie case of obviousness. In that regard, even upon combining the cited references, substantial and nonobvious modification is required to arrive at the present invention.

Applicant is the first to use an alignment line of light to provide real time feedback to a person of the actual real time alignment of a line passing transversely through a portion of the person's body. To provide such alignment information to the user of the device of the present invention is a substantial improvement in the art of, for example, golf instruction, analysis and practice.

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VIII. CLAIMS APPENDIX

1. (Previously presented) A device for assisting a person in achieving proper alignment of the person's eyes when the person is in position to perform a task, comprising:

a mechanism adapted to project a generally linear extending projection of light on a surface so that the extending projection of light is visible to the person,

a support member suitable to be donned upon the person's head;

the mechanism being attached to the support member in an orientation such that the extending projection of light is generally parallel to an alignment of a plane transversing the person's eyes when the person is in position to perform the task.

2. (Previously presented) The device of Claim 1 wherein the mechanism includes a laser and a generally cylindrical lens positioned transversely to a light beam emanating from the laser, the lens creating a planar beam of light.

Claims 3-12 (Canceled).

- 13. (Previously presented) The device of Claim 1 wherein the support member comprises a band adapted to be worn on the head of the person, the mechanism being attached to the band to be positioned to the side of one of the eyes of the user.
- 14. (Previously presented) The device of Claim 13 wherein the alignment beam is visible on the ground during a golf putting stroke.
- 15. (Previously presented) A device for assisting a person in achieving proper alignment of a portion of the person's body in a desired direction when the person is in position to execute a golf stroke, the device comprising:

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a mechanism adapted to create a line of light on a surface such that the line

of light is visible to the person

a support member to be worn by the person upon the person's body;

the mechanism being attached to the support member in an orientation so

that the line of light is generally parallel to a line passing transversely

through the portion of the person's body to provide to the person an

indication of the alignment of the portion of the person's body.

16. (Previously presented) The device of Claim 15 wherein the

support member is adapted to be worn on the head of the person so that the line of light is

generally parallel to a line running transversely through the person's eyes.

17. (Previously presented) The device of Claim 16 wherein the surface

is the ground in front of the person.

18. (Previously presented) The device of Claim 16 wherein the golf

stroke is a putting stroke.

19. (Previously presented) The device of Claim 15 wherein the

support member is adapted to be worn in the vicinity of the chest of the person so that the

line of light is generally parallel to a line running transversely through the person's chest.

20. (Previously presented) The device of Claim 15 wherein the

support member is adapted to be worn in the vicinity of the hip of the person so that the

line of light is generally parallel to a line running transversely through the person's hip.

21. (Previously presented) A method of determining alignment of a

person's eyes when the person is in position to execute a golf stroke, the method

comprising the steps of:

placing a mechanism adapted to project a generally linearly extending projection of light

onto a surface in operative connection with a side of the person's head, the mechanism

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being oriented such that the projection of light is generally parallel to a line running

transversely through the person's eyes;

projecting the projection of light onto the surface so that the projection of light is visible

to the person to provide to the person an indication of the alignment of the line passing

transversely through the person's eyes.

22. (Previously presented) The method of Claim 21 wherein the

mechanism is attached to a support member adapted to be worn on the person's head.

23. (Previously presented) The method of Claim 22 wherein the

surface is the ground in front of the person.

24. (Previously presented) The method of Claim 22 wherein the golf

stroke is a putting stroke.

25. (Canceled)

26. (Canceled)

27. (Previously presented) The device of Claim 1 wherein the support

member comprises eye glass frames to be worn on the head of the person, the mechanism

being attached to the eye glass frames to be positioned to the side of one of the eyes of the

user.

28. (Previously presented) The device of Claim 15 wherein the

support member comprises eye glass frames to be worn on the head of the person, the

mechanism being attached to the eye glass frames to be positioned to the side of one of

the eyes of the user.

29. (Previously presented) A method of determining alignment of a

portion of a person's torso when the person is in position to execute a golf stroke, the

method comprising the steps of:

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placing a mechanism in operative connection with person in the vicinity of the portion of

the person's torso, the mechanism adapted to project a generally linearly extending

projection of light onto a surface;

projecting the projection of light onto the surface so that the projection of light is visible

to the person to provide to the person an indication of the alignment of a line passing

transversely through the portion of the person's torso.

30. (Previously presented) The method of Claim 29 wherein the

mechanism is attached to the person in the vicinity of the chest of the person so that the

projection of light is generally parallel to a line running transversely through the person's

chest.

31. (Previously presented) The method of Claim 29 wherein the

mechanism is attached to the person in the vicinity of the hip of the person so that the

projection of light is generally parallel to a line running transversely through the person's

hip.

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IX. EVIDENCE APPENDIX

No such evidence has been entered.

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

In view of the foregoing, the Appellant respectfully requests that the Board of Appeals and Interferences reverse the Examiner's rejection of the claims, and that the Examiner indicate the allowability of Claims 1, 2, 13-24 and 29-31 and arrange for an official Notice of Allowance to be issued in due course.

Respectfully submitted,

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